

ART. XIV.—*Descriptions of two new Genera of Nepaul Plants.*

By MR DAVID DON, Curator of the Lambertian Herbarium\*.

A SPECIES belonging to one of the new genera now to be described, has been published long ago by Roxburgh †, under the name of *Incarvillea parasitica*. It is surprising that so acute an observer should have referred his plant to *Incarvillea*, a genus with which it scarcely agrees in one single point. The genus in question, which I propose to call *Trichosporum*, is remarkable for the singular structure of its capsule and seeds. The capsule is a span or even a foot long, ensiform, compressed, 4-celled, 2-valved; when ripe, the valves separate from each other, along their whole length: the septum finally bursts at the margin, continuing, however, always firmly fixed at its middle; the sides then become erect, and embrace each other. The seeds are very numerous, oblong, cylindrical, and rough, with minute warts; emitting at the base one and apex two very long silky hairs. These hairs are consequently so numerous, that they completely cover the seeds, as in plants of the Order *Asclepiadææ*. *Lysionotus*, the other genus, agrees in many respects with *Trichosporum*, but differs in the two-celled valves of the capsule bursting at the suture on the back; the seeds being smooth, and attenuated at both ends into a caudiform capillary appendage; and in having a 5-leaved calyx, and also in habit. The genus *Didymocarpus* of Wallich comes very near, both in habit and structure, to *Lysionotus*; but is advantageously distinguished from it, by its smooth ovate seeds, destitute of any appendage, and by its monophyllous 5-toothed calyx. These three genera form a small family of plants, to which the name of *Didymocarpeæ* may be given. They differ essentially from the *Bignoniaceææ*, as limited by Mr Brown, to which they are nearly related, in having a simple clavate stigma, pendulous, minute, ovate or cylindrical, frequently appendaged seeds; in the structure of their capsule, and form of their embryo. The plants which compose this little family, are all natives of Nepaul

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† *Plant. Coromandel*, t. 291.

and the East Indies, and are mostly dwarfish herbaceous perennial plants. The genus *Chirita* of Dr Francis Hamilton, which includes the *Didymocarpus speciosa* and *bifolia* of Wallich, has a 5-parted calyx, and a bifid stigma. They are small herbaceous perennials, with simple stems; opposite serrated or crenated leaves, and solitary peduncled, axillary flowers. Their fruit, however, and consequently the structure of their seeds, is unknown to me; but their habit, and having a divided stigma, would incline me to place them among the *Scrophularinæ*, rather than in this order.—I shall now proceed to give descriptions of *Trichosporum* and *Lysionotus*, as well as the character of the family to which they belong.

Nat. Ord. DIDYMOCARPEÆ.

*Calyx* campanulatus, 5-fidus rariùs 5-phyllus, æqualis.

*Corolla* basi tubulosa, supernè ampliata, campanulata: *limbus* 5-lobus, sub-bilabiatus: *lobis* rotundatis, in æstivatione imbricatis.

*Stamina* 4 didynama, quorum 2 in *Didymocarpo* sterilia: *filamenta* glabra, capillaria, fornicata: *antheræ* ovales v. oblongæ, nudæ, biloculares, per paria parallelo-adnatæ, in *Trichosporo* apice tantùm conniventes.

*Pistillum* 1: *germen* ensiforme: *stylus* filiformis: *stigma* simplex, clavatum sæpiùs excavatum, subinfundibuliforme.

*Capsula* siliquosa, compressa, bivalvis, 4-locularis, *dissepimento* duplici, membranaceo: *valvis* primò discedentibus: *loculis* usquè gemmatis tardiùs ad commissuras dorsales v. marginales dehiscentibus.

*Semina* ∞ minuta, pendula, ovata v. cylindræa, nuda aut rariùs in caudam brevem, capillarem utrinque desinentia v. pilos longissimos emittentia, glabra rarissimè scabra: *albumen* nullum.

*Embryo* minutus, teres, inversus: *cotyledones* oblongi embryone plùs duplò breviores: *radicula* superior, cylindræa.

Herbæ *perennnes*, *terrestres*, *acaules* rariùs *caulescentes* v. frutices *parasitici*, foliis *oppositis integerrimis coriaceis glabris*: in herbis, folia *plerumque radicalia*, *cordata*, *crenata* v. *serrata*, *hirsuta*, in *caulescentes terna*. Flores *umbellati*, *pur-*

*purei, rosei v. rubri*; in herbis, umbellæ dichotomæ, basi involucro et involucello diphylo munita.

### TRICHOSPORUM \*.

INCARVILLEÆ species, *Roxburgh.*

*Calyx* campanulatus, 5-fidus, ebracteatus: *segmentis* æqualibus. *Corolla* tubulosa, incurva, basi angustata, supernè ampliata: *ore* obliquo, 5-lobo: *lobis* plerumque rotundatis, subæqualibus in æstivatione imbricatis. *Stamina* 4, longè exserta, fertilia, 2 quorum parùm breviora: *filamenta* capillaria, fornicata, glabra: *antheræ* ovales v. oblongæ, nudæ, biloculares, obtusæ v. subacutæ, basi fissæ, apice per paria conniventes, internè post dehisceniam lamellatæ. *Pistillum* 1 rectum: *germen* compressum, ensiforme, sensim desinens in stylum filiformem: *stigma* simplex, clavatum disco excavato infundibulari, ore integerrimo. *Capsula* siliquæformis, compressa, (palmaris pedalisve), pendula, ensiformis, acuminata, bivalvis, 4-locularis dissepimento duplici: *valvis* planis per totam longitudinem primò discedentibus, extus lævibus intus lacunoso-rugosis: *septa* tenuia, papyracea, per medium artissimè affixa, demùm ad oras dehisceniam, postmodo lateribus inflexo-approximatis. *Semina* ∞ oblongo-cylindracea pendula, ad septa imbricatim affixa, papillis minutissimis scabra, ad baseos 1 apices 2 pilos longissimos tenuissimos sericos emittentia, inter quos occulta.

Frutices *parasitici*. *Caules simplices, teretes, geniculati, glabri, secus truncos arborum in more Epidendrorum scandunt et ad geniculos fibras simplices subsolitarias sæpiùs enascuntur.* *Folia opposita, petiolata, lanceolata, acuminata, carnosa, integerrima, glabra.* *Flores terminales umbellati.* *Pedicelli breves, uniflori basi unibracteolati.* *Corollæ rubræ, extus pilosæ figurâ ferè omninò Digitalis.* *Toto cælo diversa est Incarvillea Juss. cui calyx tribracteatus, antheræ bilobæ, stigma bilamellatum, capsula bivalvis bilocularis, dissepimentum simplex valvis oppositum, semina plana, suborbiculata membranâ latiusculâ cincta; caulis erectus ramosus herbaceus, foliis laciniato-pinnatis*

\* Named *Trichosporum*, from  $\theta\rho\iota\varsigma$ ,  $\tau\rho\iota\chi\omicron\varsigma$ , hair; and  $\sigma\pi\omicron\rho\alpha$ , seed, on account of the seeds being furnished with long hairs.



*ramisque alternis, floribus laxè spicatis, in characteribus omninò cum Bignoniaceis convenit, inter quas rectè ordinanda, tamen habitu discrepat quod magis ad Scrophularinas referrens ab his defectu albuminis differt.*

1. *T. grandiflorum*, foliis elongato-lanceolatis acuminatis nervosis, umbellâ multiflorâ, laciniis calycinis ovatis, corollæ lobis omnibus rutundatis subæqualibus, stylo exserto.

*Incarvillea parasitica, Roxb. Coromand. t. 291.*

*Crescit supra arbores Montium propè Sylhet, Indiæ Orientalis.—Wallich. h.*

2. *T. parviflorum*, foliis ellipticis acuminatis nervosis, umbellâ pauciflorâ, laciniis calycinis linearibus, corollæ lobis superioribus brevioribus acutiusculis, stylo incluso.

*Crescit secus truncos arborum in montosis Nepaliæ inferioris.*

*Wallich. h.*

Species à præcedente distinctissima : floribus triplò minoribus, laciniis calycis linearibus, lobis corollæ 2 superioribus multò brevioribus acutiusculis, foliis duplò latioribus brevioribusque nervosis.

These two species, although perfectly distinct, have been sent in the recent collections from India indiscriminately under the name of *Incarvillea parasitica*, Roxb. Both species are parasitical shrubs, with showy flowers, resembling in habit some species of *Loranthus*. The flowers of *T. grandiflorum* are not inferior to those of *Digitalis purpurea*.

## LYSIONOTUS\*.

INCARVILLEÆ sp. *Wallich.*

*Calyx* 5-phyllus : *foliolis* æqualibus. *Corolla*.....  
*Stamina*... .. *Pistillum* 1 : *germen* ensiforme, basi attenuatum, desinens in *stylum* filiformem : *stigma* simplex, clavatum ; *disco* excavato ore integerrimo. *Capsula* siliquosa, compressa, (triuncialis) pedicellata, stylo persistente acuminata, bivalvis, 4-locularis : *dissepimentum* duplex, membranaceum : *valvis* medium discedentibus : *loculis* usque gemmatis, demùm e

\* The name is derived from λύσις, εως, separation, dissolution ; and νᾶτος behind, the back ; from the cells of the capsule bursting at the back,

suturâ dorsali dissilientibus, extus lævibus, intus lacunosis, seminiferis. *Semina*  $\infty$  oblongo-cylindracea, pendula, lævia utrinque incaudam setiformem ipsa duplò excedentem desinentia.

*Herba perennis, terrestris. Radix repens, crassitie penna anserina, superne lignosa cortice fuscâ tecta, fibris capillaribus plumosis numerosis instructa. Caulis erectus, palmaris, cylindraceus, glaber, lævis, subcarnosus. Folia terna, ovato-lanceolata, acuminata, coriacea, serrata, petiolata, utrinque glabra, viridia, reticulatim venosa. Petioli brevissimi, semiteretes, glabri, supra canaliculati. Umbellæ 5—10-floræ, pedunculatæ. Pedunculi erecti, filiformes glabri, 3—4-pollicares, terni, parùm infra apicem caulis siti axillares simulantes. Pedicelli teretes, glabri, basi involucellis duobus subrotundo-ovatis muniti, sæpiùs simplices, nudi, 1-flori rariùs divisi medio bibracteolati, in Didymocarpo proximo calyx campanulatus 5-dentatus, semina ovata nuda non appendiculata.*

L. serrata.

*Crescit in Nepaliâ. Wallich. 4.*

In the Lambertian Herbarium is a single specimen of this plant, lately sent by Dr Wallich, the indefatigable superintendent of the Calcutta Botanic Garden, with the name *Incarvillea species* attached to it. The specimen, otherwise very perfect, is without flowers; but from the great affinity it bears to *Didymocarpus*, it is very probable that it agrees also with it in the form of its flowers, as well as in the disposition and figure of its anthers\*.

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\* Since the publication of my little paper on *Rhododendron*, &c. in the *Phil. Journ.* (vol. vi. p. 47.) a friend has pointed out to me, that the union of the genus *Asalea* (excluding *Asalea procumbens*) with *Rhododendron*, has been long ago proposed by R. A. Salisbury, Esq. in his observations on *Rhododendron chrysanthum*, in the late periodical work entitled “*Paradisus Londinensis*.” I take this opportunity of mentioning, that the following improvements and corrections may be made on the character of *Rhododendron*: P. 49. for “*basi hirsuta*.” read “*sæpiùs basi hirsuta*.” After “*5-valvis*,” insert “(in *R. arboreo* 10-locularis, 10-valvis).” For “*apice dehiscens*,” read “*ab apice dehiscens*.” The columella should have been described “*columella 5-angula* (in *R. arboreo* 10-angula).”